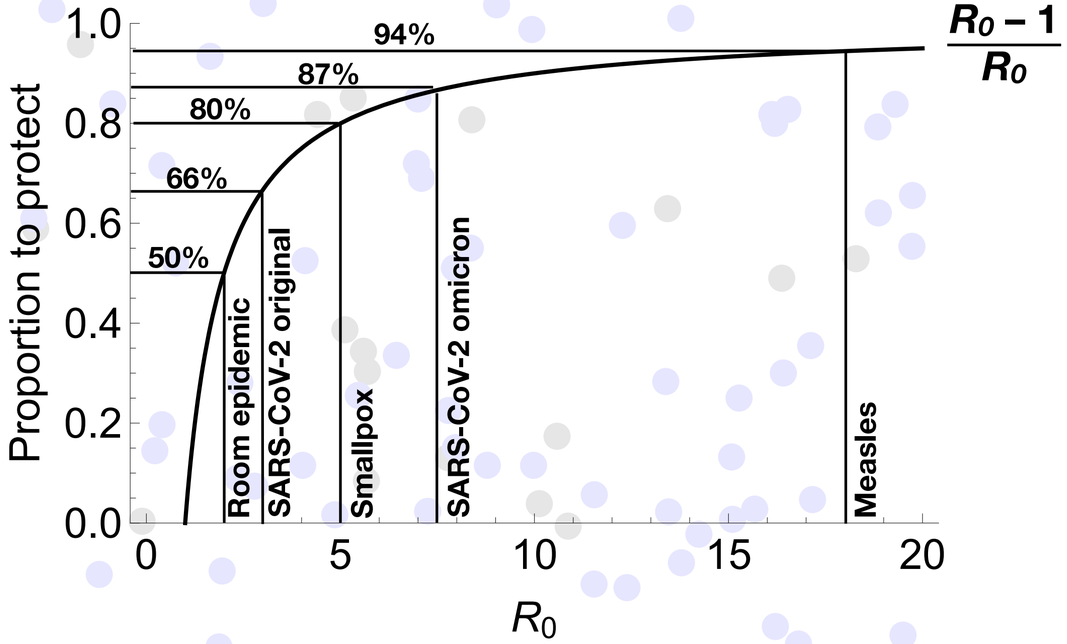
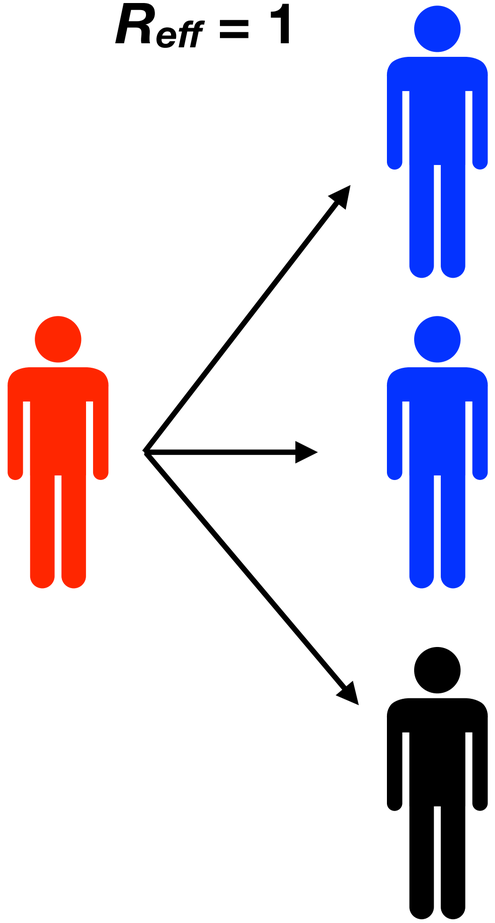
What can we infer about epidemics from the SIR model?

Herd immunity



$R_0 = 3$

$R_{eff} = 1$



2/3 of people need to be protected to prevent an epidemic

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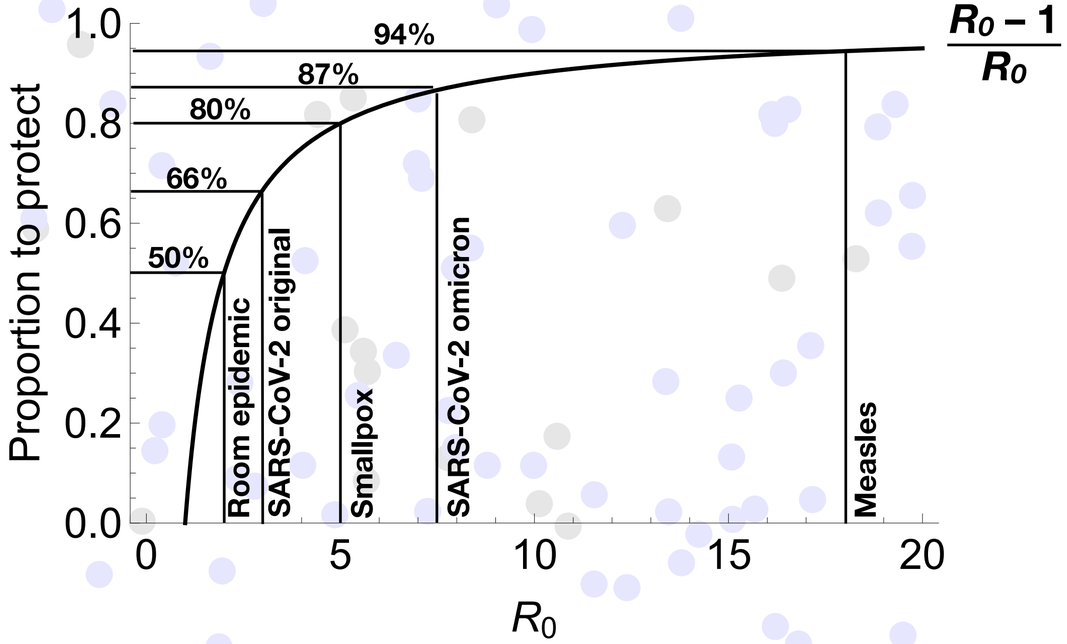

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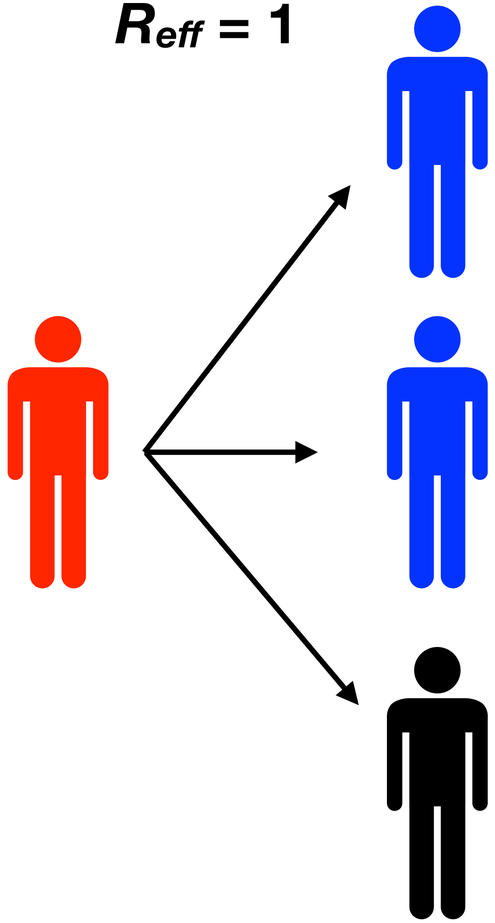

2/3 of people need to be protected to prevent an epidemic

Recall that $\mathbf{R_0 = \beta/\gamma}$. This gives us two possible ways of intervening:

1. Reduce β (through vaccination, distancing, masking, etc.)
2. Increase γ (speed up recovery, e.g. using treatments; or ensure isolation, which “shortens” the infectious period)